### **Comparisons of Job Characteristics**

Focus Occupation: Environmental Science and Protection Technicians, Including Health

(19-4091)

**Associated Occupation: Natural Sciences Managers (11-9121)** 

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

### Knowledge

Similarity of Focus Occupation to Associated Occupation: 80

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Natural Sciences Managers (11-9121)

Average **Associated** Focus **Associated Occupation's** Rating, All Occupation's Occupation's **Evaluation of Focus Occupation Key Knowledge Elements** Occupations Rating Rating Chemistry 4.8 13.5 13.2 0 Current knowledge level may be sufficient Administration and Extensive education and/or training may 8.4 12.8 9.2 Management be required Expanded education and/or training may Law and Government 5.9 12.1 9.8 be required Biology 3.7 11.8 11.4 0 Current knowledge level may be sufficient Expanded education and/or training may Engineering and Technology 5.7 11.4 9.7 be required Current knowledge level is likely more than Geography 3.9 5.9 9.7 sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation: 71

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Natural Sciences Managers (11-9121)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Science	4.5	15.7	10.3	<<	Extensive development of skills in this area may be required
Time Management	8.9	13.9	10.0	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	13.6	7.9	<<	Extensive development of skills in this area may be required
Management of Personnel Resources	6.9	13.2	6.9	<<	Extensive development of skills in this area may be required

Coordination	9.1	12.3	9.2	Extensive development of skills in this area may be required
Management of Financial Resources	3.3	8.9	3.1	Extensive development of skills in this area may be required
Technology Design	2.6	7.6	2.6	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Abilities**

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Natural Sciences Managers (11-9121)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Oral Comprehension	12.5	17.8	13.5	<<	Extensive improvement in abilities may be required	
Oral Expression	12.4	16.5	13.2	<<	Extensive improvement in abilities may be required	
Written Comprehension	11.0	16.0	13.9	<	Some improvement in abilities may be required	
Deductive Reasoning	10.6	15.5	11.8	<<	Extensive improvement in abilities may be required	
Speech Clarity	10.2	15.4	10.0	<<	Extensive improvement in abilities may be required	
Inductive Reasoning	10.2	14.8	11.4	<<	Extensive improvement in abilities may be required	
Written Expression	9.8	14.4	12.9	<	Some improvement in abilities may be required	
Speech Recognition	9.9	12.6	10.0	<	Some improvement in abilities may be required	
Originality	7.6	12.0	8.2	<<	Extensive improvement in abilities may be required	
Category Flexibility	9.0	11.6	9.5	<	Some improvement in abilities may be required	
Number Facility	6.3	10.0	9.0	<	Some improvement in abilities may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

# **Activities that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 62

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Natural Sciences Managers (11-9121)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12

Advise clients or customers	19
Analyze scientific research data or investigative findings	27
Communicate technical information	4
Confer with scientists	54
Develop plans for programs or projects	31
Develop policies, procedures, methods, or standards	21
Explain complex mathematical information	30
Prepare reports	8
Use physical science research techniques	68
Use scientific research methodology	21

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 76

Focus Occupation: Environmental Science and Protection Technicians, Including Health (19-4091) Associated Occupation: Natural Sciences Managers (11-9121)

Tools and Technologies	Exclusivity
Business function specific software	1
Cameras	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Gas analyzers and monitors	10
Hydrological instruments	31
Industry specific software	1
Information exchange software	1
Liquid and solid and elemental analyzers	19
Meteorological instruments	16
Network applications software	1
Sampling equipment	12
Soil measuring equipment	20
Viewing and observing instruments and accessories	4
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.